Statistical Series **2000-28**

EUB

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Annual Statistics for 2000

Alberta Energy and Utilities Board

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Table 1. ALBERTA ELECTRIC ENERGY CAPACITY AND GENERATION BY RESOURCE, 2000

Year / Resource Type	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
Capacity (MW)	5621.0	3071.9	864.5	78.6	30.5	25.4	9691.9
Capacity (%)	58.00%	31.70%	8.92%	0.81%	0.31%	0.26%	100%
Generation (GWh)	40459.2	15218.7	1756.3	71.8	273.8	58.2	57838.0
Generation (%)	69.95%	26.31%	3.04%	0.12%	0.47%	0.10%	100%
Capacity Factor (%)	82.17%	56.55%	23.19%	10.43%	102.48%	26.16%	68.12%

* "Others" includes oil, diesel, geothermal, and solar.

Table 2. ALBERTA ELECTRIC ENERGY NET INSTALLED CAPACITY (MCR MW) BY RESOURCE, 2000[1]

Resource Type	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
Total	5621.0	3071.9	864.5	78.6	30.5	25.4	9691.9

1 Only plants that have reported to the EUB are included.

* "Others" includes oil, diesel, geothermal, and solar.

Table 3. ALBERTA ELECTRIC ENERGY GENERATION (GWh) BY RESOURCE, 2000[1]

Resource Type	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
Total	40459.2	15218.7	1756.3	71.8	273.8	58.2	57838.0

1 Only plants that have reported to the EUB are included.

* "Others" includes oil, diesel, geothermal, and solar.

Table 4. INTERCHANGE (GWh), 2000

Interconnections	Exports	Imports	Net Interchange
British Columbia	743.1	635.0	-108.1
Saskatchewan	27.6	493.0	465.4
Montana	0.0	2.9	2.9
Total	770.7	1130.9	360.2

Table 5. ALBERTA ELECTRIC ENERGY NET INSTALLED CAPACITY (MCR MW) BY RESOURCE, 1992-2000

Year	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total
1992	5299.0	1931.7	819.7	0.6	-	8.4	8059.4
1993	5318.0	1924.6	819.7	11.5	-	14.6	8088.4
1994	5704.0	1978.3	848.7	21.4	20.7	14.6	8587.7
1995	5704.0	1982.9	848.7	21.4	20.4	12.6	8590.0
1996	5704.0	1985.4	848.7	21.4	35.4	12.6	8607.5
1997	5704.0	1995.9	848.7	21.4	31.4	12.6	8614.0
1998	5621.0	2053.9	848.7	21.3	35.4	11.8	8592.1
1999	5621.0	2315.3	851.8	21.3	51.0	12.6	8873.0
2000	5621.0	3071.9	864.5	78.6	30.5	25.4	9691.9

* "Others" includes oil, diesel, geothermal, and solar.

Table 6. ALBERTA ELECTRIC ENERGY GENERATION (GWh) BY RESOURCE AND INTERCHANGE, 1992-2000

Year	Coal	Natural Gas	Hydro	Wind	Biomass & Waste	Others*	Total	Net Interchange In	Net Interchange Out	Total
1992	38,546.7	7,492.4	1,583.1	0.5	-	16.4	47,639.1	-	1,642.7	45,996.4
1993	39,187.2	7,771.6	1,799.4	1.8	-	16.5	48,776.5	-	1,599.7	47,176.8
1994	42,269.8	8,047.4	1,771.3	35.6	16.3	16.1	52,156.5	-	2,108.6	50,047.9
1995	42,460.8	7,219.8	2,006.5	54.3	129.3	14.3	51,885.0	-	958.9	50,926.1
1996	41,220.3	8,228.3	1,973.4	59.1	229.8	13.0	51,723.9	1,883.8	-	53,607.7
1997	43,054.3	8,724.6	1,830.5	62.0	232.2	26.7	53,930.3	1,039.5	-	54,969.8
1998	41,267.7	11,467.7	2,044.6	49.4	279.1	32.1	55,140.6	768.2	-	55,908.8
1999	40,276.7	12,126.2	2,188.2	64.6	335.5	19.7	55,010.9	999.7	-	56,010.6
2000	40,459.2	15,219.9	1,756.3	71.8	273.8	57.0	57,838.0	360.2	-	58,198.2

* "Others" includes oil, diesel, geothermal, and solar.

Table 7. SYSTEM LOAD OF DISTRIBUTION UTILITY OPERATORS AT PEAK LOAD HOUR: 18:00, 12 December 2000

Distribution Utility Operators	Load (MW)
ATCO ELECTRIC	1390.7
ENMAX	1288.0
EPCOR	1025.5
UTILICORP	3341.2
CITY OF LETHBRIDGE	99.8
CITY OF MEDICINE HAT	113.7
CITY OF RED DEER	99.3
POWER POOL reported a peak demand of 7785 MW*	

* Excludes Medicine Hat and exports; includes transmission losses.

Table 8. DETAILS OF NONCOINCIDENT PEAK LOAD BY DISTRIBUTION UTILITY OPERATORS FOR ALBERTA ELECTRIC SYSTEM, 2000

Distribution Utility Operators	Peak Load (MW)	Time of Occurrence
ATCO ELECTRIC	1401.0	11:00 Dec 11/00
ENMAX	1313.0	18:00 Dec 11/00
EPCOR	1047.6	17:00 June 19/00
UTILICORP	3414.5	21:00 Dec 12/00
CITY OF LETHBRIDGE	114.7	15:30 Aug 1/00
CITY OF MEDICINE HAT	159.9	_____Aug 26/00
CITY OF RED DEER	102.8	17:30 Dec 11/00

Table 9. TOTAL CIRCUIT KILOMETRES OF TRANSMISSION AND DISTRIBUTION LINES BY MAJOR ELECTRIC UTILITY, 2000

Utility Operators	Transmission Lines (over 60 kV)	Distribution Lines (60 kV and below)	Total Lines
ATCO ELECTRIC	8,324	48,439	56,763
ENMAX	278	6,759	7,037
EPCOR	188	4,187	4,375
TRANSALTA	11,546	0	11,546
UTILICORP	0	101,061	101,061
City of Lethbridge	35	375	410
City of Medicine Hat	54	523	577
City of Red Deer	0	621	621
Other Towns	0	361	361
Total	20,425	162,326	182,751

Table 10. CIRCUIT KILOMETRES OF TRANSMISSION AND DISTRIBUTION LINES, 1992-2000

Year	Transmission Lines (over 60 kV)	Distribution Lines (60 kV and below)	Total Lines
1992	20,451	210,487	230,938
1993	20,779	188,230	209,009
1994	18,920	185,987	204,907
1995	19,979	211,260	231,239
1996	20,625	230,005	250,630
1997	20,637	199,634	220,271
1998	20,327	194,992	215,319
1999	20,456	168,964	189,420
2000	20,425	162,326	182,751

Table 11. ELECTRIC ENERGY DISTRIBUTION SALES AND NUMBER OF CUSTOMERS, 2000

Utility	Residential		Farm[1]		Commercial[2]		Industrial[3]		Total	
	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)
ATCO ELECTRIC	787.1	107,165	458.7	29,622	1,393.1	22,246	7,344.5	9,316	9,983.4	168,349
ENMAX	2,115.2	310,828	-	-	4,568.5	30,504	662.6	1,957	7,346.3	343,289
EPCOR	1,781.8	254,377	-	381	3,471.8	21,537	1,325.0	1,072	6,578.6	277,367
UTILICORP	1,895.9	250,850	1,347.6	41,561	2,611.7	54,833	17,855.4	20,646	23,710.6	367,890
City of Lethbridge	162.5	25,678	-	-	167.0	2,544	183.4	36	512.9	28,258
City of Medicine Hat	170.5	21,552	3.9	142	239.7	2,653	306.5	23	720.6	24,370
City of Red Deer	160.5	25,332	-	-	276.4	3,063	94.1	32	531.0	28,427
Other Towns & Villages[4]	40.4	6,225	0	15	48.9	1,039	11.1	19	100.4	7,298
Isolated Plants	20.5	n/a	1.1	n/a	23.5	n/a	65.0	n/a	110.1	0
Total	7,134.4	1,002,007	1,811.3	71,721	12,800.6	138,419	27,847.6	33,101	49,593.9	1,245,248

Note: These data do not include electricty generated on site and used on site.

1 Includes 31,744 Rural Electric Association (REA) customers.

2 Includes street lighting.

3 Includes transportation.

4 Includes Cardston, Fort Macleod, Municipality of Crowsnest Pass, Ponoka.

Table 12. ELECTRIC ENERGY DISTRIBUTION SALES AND NUMBER OF CUSTOMERS, 1992-2000

	Residential		Farm [1]		Commercial [2]		Industrial [3]		Total	
Year	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)	(GWh)	(No.)
1992	6,008.3	862,066	1,596.4	94,829	10,931.7	93,616	20,076.3	55,018	38,612.7	1,105,529
1993	6,204.9	854,843	1,562.7	97,770	11,097.0	129,817	20,860.2	17,649	39,724.8	1,100,079
1994	6,284.8	872,722	1,666.1	93,876	11,483.0	123,974	22,530.6	29,751	41,964.5	1,120,323
1995	6,285.6	891,148	1,632.6	94,743	11,497.1	129,116	23,650.2	32,997	43,065.5	1,148,004
1996	6,562.2	922,203	1,794.5	95,403	11,903.7	136,059	24,988.5	31,531	45,248.9	1,185,196
1997	6,520.8	905,124	1,799.1	88,915	12,290.5	141,445	25,918.0	32,226	46,528.4	1,167,710
1998	6,554.8	937,510	1,709.0	77,905	12,881.7	150,244	26,497.5	33,673	47,643.0	1,199,332
1999	6,786.2	969,733	1,734.3	90,075	12,980.6	142,615	26,500.4	33,487	48,001.5	1,235,910
2000	7,134.4	1,002,007	1,811.3	71,721	12,800.6	138,419	27,847.6	33,101	49,593.9	1,245,248

Note: These data do not include electricity generated on site and use on site.

1 Includes Rural Electric Association (REA) customers.

2 Includes street lighting.

3 Includes transportation.